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ABSTRACT

An update of an earlier publication, "Software for Substance Abuse Education," this guide provides critical reviews of available technology products designed to instruct students, teachers, or parents about alcohol and other drugs. The products included are computer software, interactive videodiscs (level III), non-interactive videodiscs (level I), and telecourses delivered via satellite. Introductory materials describe the scope of the publication and identify four common problems with approaches used in many software programs: (1) the focus is on responsible use of alcohol rather than the fact that it is illegal and harmful for adolescents; (2) a mixed message is conveyed that students have a choice, rather than showing them the consequences of their decisions; (3) focus on empowering students to make informed decisions again implies that they have a choice; and (4) the tutorial approach tends to isolate high school students who are at-risk of using alcohol or other drugs rather than integrating them into a healthy peer group. Reviews are then presented for 29 educational software products, 2 interactive video products, and 17 videodisc products. Listings contain information on the producer, copyright date, price, length of product, hardware needed, appropriate grade levels, type of instruction, type of media, a description of the content, possible uses, and strengths and weaknesses. The titles of eight television courses offered by Satellite Telecommunications Education Programming (STEP) are also listed and a directory of the producers represented in this guide is given. A glossary is also provided. (ALF)

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Technology Products for Substance Abuse Education

March 1992

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Technology Products for Substance Abuse Education

By

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March 1992

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ACKNOWLEDGMENTS

In the process of compiling this guide, every effort was made to accurately describe each product, and to identify the strengths and weaknesses. Strengths and weakness statements reflect our best judgment about the technical merits of the products and about how well the products are in accordance with the guidelines for implementing the Drug-Free Schools and Communities Act of 1986 as set forth by the United States Department of Education. Each entry, including the strengths and weaknesses, has been reviewed by the publisher to insure accuracy.

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We hope the information provides you with a guideline for use of technology in the drug and alcohol field and may inspire you to work on products of your own.

Judith A. Johnson

Judith A. Johnson, Director
Western Regional Center for Drug-Free Schools and Communities

Introduction

The purpose of this publication is to provide a resource guide to available technology products. In the process of compiling the guide, every effort was made to accurately describe each product and identify the strengths and weaknesses. Each description has also been reviewed by the publisher to insure accuracy. This publication is not intended to be a buyer's guide. We strongly recommend that you preview any product mentioned in this guide prior to purchase to ensure the materials covered match your curriculum as well as your teaching style. Contact information for the producers of all products included in this guide is listed in the "Producer Contact Information" section. Please contact the producer directly for more information about the product or for information regarding preview.

This publication is an update of an earlier edition published by the Northwest Regional Educational Laboratory in October 1988 titled "Software for Substance Abuse Education." A lot has happened in the field of instructional use of technology since then. New, more sophisticated software has been developed and new technologies such as interactive videodiscs, CD-ROM, and satellite courses have slowly emerged as viable applications of technology for K-12 education. In this edition, we have broadened the scope to include products that are now available that take advantage of these new technologies.

For the purpose of this report, "Technology Products" are defined to include computer software, interactive videodiscs (level III), non-interactive videodiscs (level I), and distance learning courses delivered via satellite or other forms of advanced technology. Instructional media such as film strips, audio tapes, video cassettes are not included. In addition, only products that are designed to instruct students, teachers, or parents about alcohol and other drugs are included. Consequently, products such as word processors, databases, spreadsheets, and other such tools that could be used to manage drug abuse education programs are not included.

Our Findings Regarding the Software

In the 1988 edition, there was a section that summarized our impressions. After reviewing this earlier work, we must conclude that educational technology products haven't improved very much during the past three and a half years. There are more products (31 now as opposed to 19 in 1988) and they are generally improved from a technical standpoint. However, many of the problems that were evident then are still present.

The primary reason for this is that almost all of the products that were included in the 1988 edition are still available today and are also included in this edition. Most have undergone modification and revision since then. However, the revisions were primarily to improve the program technically or to update the content. Few of the product revisions were changes in the approach of the program to incorporate what we now know about alcohol and other drug prevention education. The newer products were technically more sophisticated but often contained some of the same problems with approach as did the earlier products. Common problems found in the software program include:

1. **Responsible Use of Alcohol**--Some programs attempted to teach students responsible use of alcohol, ignoring or down-playing the fact that alcohol use is illegal and harmful for adolescents.

2. **Implied Choice**--Many of the programs, especially those programs with decision making simulations, convey a mixed message to students. Although the point of the

program is to show students the consequences of the decision they make regarding alcohol and other drug use, the fact that they have a choice seeds the idea that they could choose to use alcohol and other drugs.

3. **Focus on Facts about Drugs**--Most of the programs did an excellent job of teaching students the facts about drugs. The programs teach students the physiological effects, psychological effects, the types of drugs, proper and street terminology for drugs, and more. The intent of this approach in isolation is to empower the students with the information so that they can make informed decisions regarding alcohol and other drug use. Once again this approach implies choice.

4. **Tutorial Approach**--The vast majority of the software programs are tutorial in nature. They are comprised of a linear sequence of text and graphic screens followed by one or more multiple-choice or true/false questions. Branching to lessons that are appropriate to the students individual pace is absolutely minimal. The tutorials are designed to be used independently by a single student at a time. One of the critical audiences for substance abuse prevention programs are at risk high school students. Students who are statistically at risk of using alcohol or other drugs because of factors such as low academic achievement, parental use, or low socioeconomic status, are not likely to be motivated by the tutorial approach of most of these packages. It is important that a student who is identified as at-risk of using alcohol and other drugs not be isolated and stigmatized, but integrated into a healthy peer group. A program which encourages group participation would be more appropriate for this audience rather than tutorials.

Computer software programs that clearly communicate that alcohol and other drug use is illegal, state why our society has made it illegal, and arm students with the skills to avoid alcohol and other drug use are still hard to find. Most fall short of communicating this clear "no-use" message to students. We recommend that you preview any of the products described in this guide before purchase to insure the material covered matches your curriculum and is presented in a way that matches your teaching style.

Alcohol: 4 Interactive Programs

Producer: Student Awareness Software **Copyright:** 1987

Price: $89.95

Hardware: Apple II family with a single disk drive. Color monitor and printer are optional

Grades: 6-12 **Type:** Tutorial

Contents: This package contains five double-sided 5.25 inch disks and a 67-page manual.

Description: Program 1, "Alcohol and Your Health," covers a brief history of alcohol, the definition of proof, the physical effects of alcohol, and the factors which influence the effects. Program 2, "Drinking: Risks and Decisions," covers who does and does not drink, reasons for drinking, peer pressure, blood alcohol level (BAL), noticeable effects of alcohol, and the dangers of alcohol. Program 3, "Drinking, Driving, and You," covers the effects of alcohol on vision, reactions, and judgment handicapping his/her driving ability; drinking and driving laws, punishment, and fines; and the price you pay for drinking. Program 4, "Questions, Myths, and Answers," provides current information designed to dispel commonly held myths about alcohol use. In addition, Program 4 includes a section where students can request further information on alcohol-related subjects and/or receive information about local drug and alcohol counselling resources. The requests entered by students may be accessed confidentially by the teacher using the Teacher's Notebook disk. The Teacher's Notebook disk is also used to create printed student worksheets, review student scores and add information about local drug and alcohol resources. Each of the program disks provides interactive tutorials interspersed with games and activities which allow the students the opportunity to apply the information covered in the tutorial. Each program concludes with a review of the material covered. This product is also available from Focus Media under the title "Alcohol: Making the Choice."

Possible Uses: Portions of this package are useful in health, driver's education, and career education at the high school level and can be used by one to three students at a time.

Strengths: The package does a thorough job of covering the materials (including peer resistance skills), is well-organized and easy to use. The "Workshop" activities and games give students the opportunity to apply what has been presented.

Weaknesses: Use of the package requires considerable reading. The program accesses the disk frequently, making it run slowly. Because the teacher cannot speed up the text presentation, it is slow for the more skilled readers. Students just receive the message "Incorrect" if they enter a wrong answer.

Comments: The program talks down to the students making it more appropriate for use with junior high school students.

Alcohol and Health Program

Producer: BLS TutorSystems, Inc. **Copyright:** 1984

Price: $120.00

Hardware: Apple II + e c 48K

Grades: 6-12

Type: Tutorial

Contents: This package contains two 5.25 inch disks and a 10-page teacher's guide.

Description: Each disk contains a series of tutorials, a mastery test, and a "Student Monitor" or management system which records and reports the results of the mastery test. Each disk begins by stating the objectives of the lessons and then moves into the tutorials. The tutorials are a series of text passages followed by either multiple-choice or true/false questions. The lessons on disk 1 cover "Ethyl Alcohol," "Brief History," "Patterns of Drinking in the United States," "Reasons for Drinking Alcohol," "Reasons for Not Drinking Alcohol," "How Alcohol Affects the Body," "Behavior as Affected by Group Drinking," "Concentrations of Alcohol in the Bloodstream," "Effects of Alcohol on Brain Cells," and "Reasons for Drinking to Intoxication." The lessons on Disk 2 cover "Alcoholic Beverages and Automobile Accidents," "Alcoholism," "Alcohol and the Law," and "Views and Practices Concerning Alcoholic Beverages in the U.S.A."

Possible Uses: This program is appropriate for use with individual students.

Strengths: The management system is helpful for maintaining the scores on the mastery test but does little to keep track of where each student is in the sequence of lessons.

Weaknesses: Although the program does deal with the illegality of the use of alcohol for adolescents, it explicitly states in the goals that it "does not urge you to avoid drinking alcohol. It merely gives you the facts so you will be better able to make you own decisions." This approach to the issue conveys a mixed message about using alcohol to adolescents. The instructional format of text followed by questions without any variation or graphics is very uninteresting. No branching is provided nor is there a way to escape from a lesson or to begin with any lesson in the sequence. The student must start at the beginning and go through until completion. This is technically unacceptable by current standards.

Alcohol: Drinking or Not Drinking: The Choice is Yours

Producer: Substance Abuse Education **Copyright:** 1992

Price: $44.95, $199.75 for the network version

Hardware: Apple II family with 64K RAM; MS-DOS with 256K RAM and CGA, EGA, or VGA graphics card; Macintosh with 1MB of RAM and HyperCard 1.2 or higher

Grades: 7-12

Type: Tutorial, drill

Contents: One 5.25 inch disk and a one-page instruction sheet.

Description: This program provides a list of objectives, 3 tutorial lessons, a glossary of 15 alcohol-related terms, and a 20-question multiple-choice test. The tutorials are titled "What is Alcohol," "The Physical Effects of Alcohol," and "The Psychological Effects of Alcohol." Together the lessons cover depressants; how alcohol passes through the body; the pleasant, unpleasant, and dangerous effects of alcohol on the body, factors that influence the effects of alcohol, and the reasons for laws controlling alcohol use. The tutorials are made up of a mixture of text and graphic screen and multiple-choice or true/false questions. An explanation is given after each student response. The Macintosh version offers some additional features. A "Special Interest" file is available which students can use to enter messages, questions, and concerns to the teacher. The "Taking Chances" game allows students to assume the roles of three different individuals who are confronted with alcohol-related social situations. Students make choices and see the consequences of their decisions.

Possible Uses: This package is useful with highly motivated students, one student or a small group of students at a time.

Strengths: The screen layout is colorful and attractive. The glossary of terms is available at any time during the lessons.

Weaknesses: The lessons are a linear sequence with no branching or randomization of questions. The MS-DOS version implies choice and does not stress the illegality of adolescent drinking. The Macintosh version does state alcohol is illegal for adolescents.

Alcohol: Making the Choice

Producer: Focus Media, Inc. **Copyright:** 1988

Price: $159.00, 12-copy lab pack for $477.00

Hardware: Apple II family with 64K RAM, MS-DOS with 256K RAM

Grades: 5-12 **Type:** Tutorial

Contents: Five 5.25 disk and an 15-page teacher's guide.

Description: This package is the same as the package titled "Alcohol: 4 Interactive Programs" from Student Awareness Software. Program 1, "Alcohol and Your Health," covers a brief history of alcohol, the definition of proof, the physical effects of alcohol, and the factors which influence the effects. Program 2, "Drinking: Risks and Decisions," covers who does and does not drink, reasons for drinking, peer pressure, blood alcohol level (BAL), noticeable effects of alcohol, and the dangers of alcohol. Program 3, "Drinking, Driving, and You," covers the effects of alcohol on vision, reactions, and judgment handicapping his/her driving ability; drinking and driving laws, punishment, and fines; and the price you pay for drinking. Program 4, "Questions, Myths, and Answers," provides current information designed to dispel commonly held myths about alcohol use. In addition, Program 4 includes a section where students can request further information on alcohol-related subjects and/or receive information about local drug and alcohol counselling resources. The requests entered by students may be accessed confidentially by the teacher using the Teacher's Notebook disk. The Teacher's Notebook disk is also used to create printed student worksheets, review student scores and add information about local drug and alcohol resources. Each of the program disks provides interactive tutorials interspersed with games and activities which allow the students the opportunity to apply the information covered in the tutorial. Each program concludes with a review of the material covered. This product is also available from Focus Media under the title "Alcohol: Making the Choice."

Possible Uses: Portions of this package are useful in health, driver's education, and career education at the high school level and can be used by one to three students at a time.

Strengths: The package does a thorough job of covering the materials (including peer resistance skills), is well-organized and easy to use. The "Workshop" activities and games give students the opportunity to apply what has been presented.

Weaknesses: Use of the package requires considerable reading. The program accesses the disk frequently, making it run slowly. Because the teacher cannot speed up the text presentation, it is slow for the more skilled readers. Students just receive the message "Incorrect" if they enter a wrong answer.

Comments: The program talks down to the students making it more appropriate for use with junior high school students.

Alcohol & Pregnancy: Protecting The Unborn Child

Producer: Student Awareness Software **Copyright:** 1988

Price: $89.95

Hardware: Apple II family with a single disk drive, MS-DOS

Grades: 7-Adult

Type: Tutorial

Contents: This package contains three 5.25 inch disks and a 67-page manual.

Description: The program is comprised of a series of interactive tutorials and activities. The tutorials use text and colorful graphics animation and games to involve the student. Disk 1 covers "Planning For a Healthy Baby," "A Historical Overview," "Fetal Alcohol Syndrome and Fetal Alcohol Effects," "Alcohol and the Human Body," and "Nutrients & Oxygen: Two Important Factors." Disk 2 covers "Fetal Alcohol Exposure," "Nutrition and Fetal Growth," "Questions, Myths, and Answers," "The Maternity Counselor Workshop," and a comprehensive review. The Teacher's Notebook disk is used to review student scores and add information about local counseling resources. Each of the program disks provide interactive tutorials interspersed with games and activities which allow the student the opportunity to apply the information covered in the tutorial.

Possible Uses: This package would be useful at the high school level and can be used by one to three students at a time.

Strengths: The package does a thorough job of covering the materials (including peer refusal skills), is well-organized, and is easy to use. The "Workshop" activities and games give students the opportunity to apply what has been presented.

Weaknesses: Use of the package requires considerable reading and repetition with little interaction on the part of the student. The program accesses the disk frequently making it run slowly. Because the teacher cannot speed up text presentation, it is slow for the more skilled readers. Students just receive the message "Incorrect" if they enter the wrong answer. The package does not address the illegal aspects of drinking.

Alcohol: The Party

Producer: MarshWare, A Division of Marshfilm, Inc. **Copyright:** 1984

Price: $65.00, $130.00 for a five-disk lab pack.

Hardware: Apple II+ e c GS with 48K RAM, one 5.25 inch disk drive, color or black and white monitor; MS-DOS with 256K RAM

Grades: 7-8

Type: Simulation, tutorial

Contents: One 5.25 inch disk and a 17-page user manual with one reproducible data recording form, detailed program instructions and instructions to the teacher.

Description: In the tutorial, the student is presented with a series of 12 multiple-choice questions. After each response, the program displays an informative text passage which either corrects the student or provides further clarification. "The Party" is a simulation of a social gathering where the guests make decisions about alcohol consumption and see the results of their decisions. The guest list may include from one to six students plus a number of guests whose role is determined by the computer. Each student guest must enter their name, age, weight, and sex. The same personal data for the other guests played by the computer is also revealed. The party begins at 7:00 PM and continues until 12:00 PM. Each hour guests decide whether or not to stay at the party and if so, the number and type of beverage they plan to consume during the next hour, whether they plan to gulp or sip the drink, and whether or not they will be eating any pizza. After the students have entered their decisions, a graph is displayed for each guest showing his/her blood alcohol concentration at the end of the hour together with a report on their feelings and behavior. Next, the guests play a video game which reveals the effects of the blood alcohol concentration on their performance. Other events which could occur during the party include a police raid, guests becoming ill, or a guest passing out and being taken to the hospital. At midnight, all guests must go home by choosing to drive, calling a cab, calling a friend, or asking another guest for a ride. Depending upon the condition of the driver, he/she could arrive home safely, be stopped by police, or be involved in an accident.

Possible Uses: The program would work with as many as six students at a time, however, four is really ideal.

Strengths: The tutorial presents a lot of good information. The simulation offers an engaging approach to the subject that is both motivating and relevant. The presence of other "guests" which the students can observe is an effective feature that allows them to see how alcohol affects individuals of various ages and physical size.

Weaknesses: The simulation does not communicate a clear "no use" message and does not address the illegality of the "party" itself. It is a given that alcohol is being consumed at this party regardless of the age of the "guests." Although the simulation allows the student to leave the party, there is no reward in doing so. In fact, the program can actually encourage the moderate use of alcohol by teaching students how much they can drink before experiencing harmful effects.

Body Awareness Resource Network (BARN): Alcohol & Other Drugs

Producer: Learning Multi-Systems, Inc. **Copyright:** 1991

Price: $120.00, Complete BARN Series is $720.00

Hardware: Apple II family, MS-DOS computer with 512K of RAM, network versions are available

Grades: 8-12

Type: Tutorial

Contents: Five 5.25 inch disks or two 3.5 inch disks.

Description: "Alcohol and Other Drugs" is one of six modules that makes up the "Body Awareness Resource Network (BARN)." The program offers eight activities in which students interact with Barny who helps them cope with difficult life choices. "How Dependency Happens" is a tutorial that covers physical and psychological dependency on alcohol and other drugs. "Overdose" is a tutorial that discusses overdoses and what to do in the event it happens. "Stand Up For Yourself" is a tutorial that helps students develop refusal skills. "Should I" is an activity that helps students realize the devastating effects of alcohol and other drug abuse on their personal life and goal achievement. The game "You Bet Your Life," is a decision-making simulation which helps students see the consequences of their decisions regarding drug use. The game "Stay on Track," is a decision-making simulation that involves the use of alcohol while driving. "Who Can Help" is a resource database of information about local and national alcohol and other drug assistance organizations. The teacher can add or modify the information contained in the database. The program also contains "Whiz Quiz" which can be used as a pre- or post-tests over the material. All of the tutorials, activities, and games are highly interactive, eliciting student responses to situations and then helping them assess the outcome in a positive manner.

Possible Uses: This program is most appropriate for use with individual students or small groups of students.

Strengths: The program does an excellent job of stressing the illegality of alcohol and other drug use for adolescents. Although students are given choices, the consequences are always examined in depth and often supported with statistical data.

Weaknesses: Some of the activities are contrived and unrealistic. For example, in the "Stay on Track" game that involves a simulated journey by car to a resort in a remote rural setting, the students were stopped twice by police.

Danger of Drugs, The

Producer: Queue, Inc. **Copyright:** 1989

Price: $49.95, $59.95 with management system

Hardware: Apple II family with 48K and one 5.25 inch disk drive, MS-DOS with 64K ram and one 5.25 inch disk drive.

Grades: 4-12

Type: Tutorial

Contents: One 5.25 inch disk, a 14-page user's guide.

Description: This package covers the same materials and is similar in format to another product from Queue titled "Drug Abuse." The major difference between the two packages is that "The Danger of Drugs" is intended for students with a 3rd or 4th grade reading level. It contains 10 tutorials made up of a series of text passages followed by one or more related multiple-choice, true/false, or fill-in-the-blank questions. At the end of each lesson, the program reports the number of questions the student answered correctly and incorrectly, and the percentage correct. A management system records the student's progress for review or printing by the teacher at a later time. The introduction defines prescription and over-the-counter drugs and gives an overview of the five categories of drugs that are most widely abused. Other lessons provide information about categories of drugs such as opiates, marijuana and hashish, LSD and PCP, amphetamines, alcohol, sedatives, stimulants, vapors, antihistamines, and tobacco. The review identifies various federal and local organizations established to help alcohol and other drug abusers break their addiction.

Possible Uses: This package is most appropriate for use by individual students.

Strengths: This program provides information about a wide variety of drugs and focuses on the harmful effects. Students are given correct responses and explanation each time he/she gives an incorrect answer.

Weaknesses: The legality issue is covered in terms identifying which drugs are illegal, over-the-counter, prescription, etc. Alcohol is said to be a legal drug and the program does not address its illegality for minors. The lessons are a linear sequence with no branching or randomization of questions. The instructional format of text followed by questions without any variation or graphics is uninteresting. The sound cannot be turned off. The program is technically primitive by current standards.

Drug Abuse

Producer: Queue, Inc. **Copyright:** 1986

Price: $39.95, $49.95 with management system

Hardware: Apple II family with 48K and one 5.25 inch disk drive, MS-DOS with 64K ram and one 5.25 inch disk drive.

Grades: 7-12

Type: Tutorial

Contents: One 5.25 inch disk, a 12-page user's guide.

Description: This package covers the same materials and is similar in format to another product from Queue titled "The Danger of Drugs." The major difference between the two packages is that "Drug Abuse" is intended for students with a 7th grade or higher reading level. It contains 10 tutorials made up of a series of text passages followed by one or more related multiple-choice, true/false, or fill-in-the-blank questions. At the end of each lesson, the program reports the number of questions the student answered correctly and incorrectly, and the percentage correct. A management system records the student's progress for review or printing by the teacher at a later time. The introduction defines prescription and over-the-counter drugs and gives an overview of the five categories of drugs that are the most widely abused. Other lessons provide information about categories of drugs such as opiates, marijuana and hashish, LSD and PCP, amphetamines, alcohol, sedatives, stimulants, vapors, antihistamines, and tobacco. The review identifies various federal and local organizations established to help alcohol and other drug abusers break their addiction.

Possible Uses: This package is most appropriate for use by individual students.

Strengths: This program provides information about a wide variety of drugs and focuses on the harmful effects. Students are given correct responses and explanation each time he/she gives an incorrect answer.

Weaknesses: The legality issue is covered in terms identifying which drugs are illegal, over-the-counter, prescription, etc. Alcohol is said to be a legal drug and the program does not address its illegality for minors. The lessons are a linear sequence with no branching or randomization of questions. The instructional format of text followed by questions without any variation or graphics is uninteresting. The sound cannot be turned off. The program is technically primitive by current standards.

Drug Abuse Learning Environment (DALE)

Producer: Substance Abuse Education **Copyright:** 1990

Price: $79.95 for each module, $399.75 for the network version.

Hardware: MS-DOS with 512K RAM

Grades: 4-12

Type: Tutorial, game

Contents: Four 5.25 inch disks and a 12-page user's guide.

Description: The "Drug Abuse Learning Environment (DALE)" is a series of three packages that utilize a similar structure and format but cover information appropriate for a different set of grade levels. Individual levels are available for grades 4-6, 7-9, and 10-12. In each package, students can travel from room-to-room in the "DALE Schoolhouse" to learn about various drug-related topics. In each room, students are given direction from the instructor and read the lesson from the on-screen textbook that is filled with colorful graphics and animation. Students may move freely through the lesson at their own pace. Definitions are readily available for key words within the text in the event the students encounter a word they do not understand. Each lesson concludes with a quiz made up of multiple-choice and true/false questions. If students receive a score of 80% or higher on the quiz, the arcade game room is open to them as their reward. Four arcade games are available for the students' enjoyment. A library room is also available where students can review the definitions of the keywords found in the lessons. Lesson rooms are available that cover basic alcohol and other drug information, alcohol and a other drugs and the law, alcohol and other drug dependency, alcohol and other drugs and you, and alcohol and other drugs and your body. The package also contains a questionnaire program that allows the teacher to print out multiple choice tests that assess students' understanding of the materials covered in the lessons.

Possible Uses: This program is most appropriate for use by individual students.

Strengths: The program does a nice job of explaining why laws exist to control alcohol and other drug use and stressing the illegal aspect for adolescence. The program employs an attractive and colorful format that makes the tutorial and drill aspect of the program more interesting.

Weaknesses: The arcade games do not reinforce any of the skills developed in the lessons. For example, the "Hangman" game does not draw from the terms covered in the lessons.

Drug Alert!

Producer: Mindscape Educational Software, A Division of SVE **Copyright:** 1986

Price: $59.95, $119.95 for a five-disk lab pack.

Hardware: Apple II family with 48K of RAM

Grades: 5-9 **Type:** Game

Contents: One disk, a back-up, and a 59-page user's manual containing program operating instructions, lesson plans, and reproducible student worksheets.

Description: Drug Alert! is an adventure game in which students are challenged to help a friend who is hooked on drugs get out of a hotel frequented by dealers and users. Students begin in the basement and must go up four floors to the exit. Each floor has two stashes of drugs which the student must find and incinerate before they may go up the elevator to the next floor. Initially, the students find the "Drug Alert! Handbook," a drug information database, which serves as a valuable resource during the adventure. Many pages are missing, however, and as they move from room to room they find and pick up the various missing crumpled pages. Occasionally, they encounter other people who will not let them pass until they answer a question about drugs. Students may browse or search the handbook to find the answer or try to find an alternate route. Before the students may leave the hotel, they must identify the drug the friend has taken. Each floor contains clues which assist in the identification of the unknown drug. A drug identification worksheet is available for recording and organizing the clues. A management system maintains the progress and prints reports for up to 40 students.

Possible Uses: The database activities could be used with high school students. The game aspect may be useful as a review.

Strengths: The manual provides a sequence of eight lesson plans about the effects of licit and illicit drugs. The activities make use of the limited database (Drug Alert! Handbook) of information about various drugs.

Weaknesses: The game takes place in a sub-basement of a run-down hotel full of seedy people. Such a scenario is not an accurate picture of how drugs are used by today's youth. Since searching the database requires browsing various lists, searching the database is laborious and the information provided is minimal.

Comments: Playing the game to completion is likely to take longer than a normal class period; however, the program provides a "Bookmark" which saves the student's progress to disk. Students learn about the various drugs incidentally as they play the game making it difficult to know exactly what the students have learned as a result. Consequently, the activities outlined in the manual may be more valuable to classroom teachers. The game is better for review than for use as a stand-alone package.

Drug Pursuit Level I & II

Producer: CompTech Systems Design **Copyright:** 1986

Price: Each level is available for $39.95, $59.95 with management system, or $110.00 for both packages with management system.

Hardware: Apple II family with 48K

Grades: Level I-Grades 6-8, Level II-Grades 9-Adult

Type: Game, drill

Contents: A program disk with the student program on one side and the teacher utility on the other, a question disk, and a seven-page user manual.

Description: This program provides a trivia-type educational game in which one to four students compete in a bicycle race by correctly answering drug-related trivia fill-in-the-blank questions. To win, students must be the first to correctly answer at least one question from each of five categories. A colorful map and several scenes help the student track his/her progress along the race course. The categories initially provided are uppers, downers, inside/out, tobacco/pot, and potpourri. The categories are the same on both level I and II, but level I is appropriate for grades 6-8 while level II is appropriate for grades nine and above. The teacher utility program enables teachers to create, edit, and print question sets; define races; generate reports; and create "Race Information disks" for storing student and race information. A save race feature enables students to compete an unfinished race at another time.

Possible Uses: The program could be used as a review at the end of a drug education unit.

Strengths: The teacher can enter up to three alternate correct answers for each question. The fill-in-the-blank format requires proper spelling. The ability to add and modify questions makes the program applicable to many different topics.

Weaknesses: Numerous disk accesses make the program run very slowly. Disk swapping is required even with two disk drives. With one disk drive, disks must be exchanged with each question. The materials provided use a lot of slang and street terms. Success with the program indicates a good knowledge of street language regarding drugs.

Drugs and Heartbeat: Experiments with a Daphnia

Producer: Cross Educational Software **Copyright:** 1987

Price: $29.95

Hardware: Apple II family with 48K of RAM

Grades: 7-12

Type: Simulation

Contents: A program disk, a back-up disk, an 11-page teacher's guide, and a student heartbeat data record sheet.

Description: The program begins with a brief tutorial which explains stimulants and depressants, background and anatomy of the Daphnia, and how to perform the experiment. In the experiment, students apply various drugs to a Daphnia specimen in the simulated lab. For each application of a drug, the students must observe the Daphnia and calculate the heart rate by counting the heartbeats for a timed interval. Heart rate is recorded for the Daphnia's normal rate and then under the influence of alcohol, caffeine, nicotine, Valium, cocaine, and codeine. The resulting data may be graphed using the provided graph sheet or using the graphing function included with the program. The support materials provide a quiz and a bibliography along with the program operating instructions.

Possible Uses: This package is most appropriate for use in a secondary science class with small groups of two or three students.

Strengths: Students can clearly see the effects of the various drugs on the Daphnia. The graph capability is a good use of the computer.

Weaknesses: The manual reviews the content but does not give clear program operating instructions. If an error is made during graphing, the student must start over. The graph should be scaled better to allow comparison of more results.

Comments: The program would be appropriate for infusing drug education into a science class.

Drugs: Friend or Foe?

Producer: MarshWare, A Division of Marshfilm, Inc. **Copyright:** 1990

Price: $55.00, $110.00 for a five-disk lab pack.

Hardware: Apple II+ e c GS with 48K RAM, one 5.25 inch disk drive, color or black and white monitor

Grades: 2-4

Type: Tutorial, drill, game

Contents: One double-sided 5.25 inch disk and an 11-page user manual with detailed program instructions, instructions to the teacher, a glossary of terms, and an answer key to the on-line quiz students encounter in the program.

Description: The program offers three tutorials titled "Learn how drugs can be a friend," "Learn how drugs can be a foe," and "Learn about drug safety." Each tutorial is a series of text and graphic screens that are reinforced with multiple-choice questions. If the student answers a question incorrectly, the program loops back to the tutorial screen that contains the answer. Be on the "Safety Squad" is an activity in which students must determine whether the actions of the people described in a series of "cases" is dangerous or safe. If the action of the person is dangerous, students must also identify exactly what was dangerous about it and what the person should have done instead. If students answer correctly, they are given the opportunity to play a hangman-type game using drug-related words that were introduced in the tutorials. The program also contains an 18-word glossary that is accessible from the main menu or from the tutorial screens. A management system records the responses students make during the "Be on the Safety Squad" activity to disk for up to 25 students. The record can be reviewed on screen or printed at a later time.

Possible Uses: The package is most appropriate for use with individual students. Small groups of two to three students would also benefit.

Strengths: The "Safety Squad" activity would be useful in helping students distinguish between the safe and dangerous uses of drugs. The fact that it requires the students to identify both the dangerous aspect of the action as well as the proper alternative action is a strong feature of this program.

Weaknesses: The lessons are strictly linear with no randomization or branching. Incorrect responses loop back to an earlier portion of the sequence. This format is not particularly interesting and does not engage the student. The reading level seems too high, especially for grade 2.

Drugs: Their Effects on You

Producer: MarshWare, A Division of Marshfilm, Inc. **Copyright:** 1987

Price: $65.00, $130.00 for a five-disk lab pack.

Hardware: Apple II+ e c GS with 48K RAM, one 5.25 inch disk drive, color or black and white monitor

Grades: 7-8

Type: Tutorial, drill

Contents: One 5.25 inch disk and a 11-page user manual with one reproducible data recording form, detailed program instructions and instructions to the teacher.

Description: The software contains a series of eight interactive tutorials, a 25-question quiz, and a dictionary of 14 drug-related terms. Students have the option of doing any of the eight available tutorials or all of the tutorials in order. The tutorials cover what drugs are, stimulants, depressants, hallucinogens, narcotics, peer pressure, taking risks, and saying no. Each tutorial is a series of text and graphic screens that are reinforced with questions. If the student answers a question incorrectly, the program loops back to the tutorial screen that contains the answer. Two of the tutorials relate statistical data to the student's personal experience. For example, at one point, the student is asked to enter his/her weight or the weight of someone he/she knows. The program then calculates the number of drinks that would make the person legally drunk. Another time, the students enter the number of packs of cigarettes per day someone smokes and the number of years that person has been smoking. The computer calculates the total number of cigarettes that person has smoked and gives the resulting decrease in his/her life expectancy.

Possible Uses: The package is most appropriate for use with individual students. Small groups of two to three students would also benefit.

Strengths: The portion of the program which relates student-entered data to known outcomes is a helpful feature.

Weaknesses: The lessons are strictly linear with no randomization or branching. Incorrect responses loop back to an earlier portion of the sequence. This format is not particularly interesting and does not engage the student. The reading level seems too high in some places and low in others. The quiz gives exactly the same question presented in the lessons. The program states that "In the United States alcohol is a socially acceptable legal drug," and does not state that alcohol is illegal for adolescents. The illegality of alcohol and other drug use is addressed as a refusal technique.

Drugs: Who's In Control?

Producer: MarshWare, A Division of Marshfilm, Inc. **Copyright:** 1987

Price: $65.00, $130.00 for a five-disk lab pack.

Hardware: Apple II+ e c GS with 48K RAM, one 5.25 inch disk drive, color or black and white monitor

Grades: 7-8

Type: Simulation

Contents: One 5.25 inch disk, a nine-page user manual, and two reproducible student record sheets.

Description: The software is designed to manage as many as nine small groups of two to six students each. Half of the students in each group assume the role of the follower, a person who is easily persuaded to go along with the crowd, and the other half of the students assume the role of the friend whose role it is to keep the followers out of trouble. The follower may be either male or female. Each group in turn is presented with a series of four scenarios involving drug and alcohol use. For each scenario, the group must discuss the situation from his/her assigned point of view, evaluate the choices, weigh the risks, make a decision, and evaluate the results as given by the computer. If a group yields to peer pressure and makes an unhealthy choice, that group is likely to encounter higher-risk scenarios in subsequent rounds. Groups which make safe choices are likely to encounter lower-risk scenarios. This package is designed to be used after all of the students have used the first package in the series titled "Drugs: Their Effects on You." A print option allows students to print scenarios, choices, and results.

Possible Uses: This program provides an activity for teaching peer resistance, refusal, decision-making, and critical thinking skills at the middle school or junior high level.

Strengths: The computer generates realistic scenarios which simulated group discussion.

Weaknesses: It would be helpful if the user manual included a list of the possible scenarios, choices, and results. Without the printer, there is no way to go back and review the choices after receiving the results.

Great Knowledge Race: Substance Abuse

Producer: Focus Media, Inc. **Copyright:** 1987

Price: $45.00, 12-copy lab pack for $135.00

Hardware: Apple II family with 48K RAM

Grades: 4-8

Type: Game, Drill

Contents: Two 5.25 disk and a 16-page teacher's guide.

Description: "The Great Knowledge Race" is a trivia-like board game for up to four players or teams of players. Players are presented with a game board of colored square symbols in which each symbol represents one of four categories of questions plus a "potluck" category. The potluck category includes questions from all of the other categories. Each player (or team) in turn rolls the dice (simulated on the computer, of course), moves around the game board in a path that will place him/her on a desired category, and then answers a multiple-choice question from that category. If he/she answers correctly, he/she wins that category and a chance to roll again. If he/she misses the question the turn goes to the next player. To win the game, a player must be the first to correctly answer at least one question in each of the five categories. The categories available include alcohol, drugs, smoking, and dangers in foods and food additives. Game options available, which may be turned on or off, are sound, question timer, and a cross on the dice which indicates loss of turn.

Possible Uses: This program would best be used as a review game at the end of a unit which covers alcohol and other drugs, smoking, and food additives.

Strengths: The game flows well and could make a suitable review.

Weaknesses: The package focuses on facts and trivia and does not stress the illegality of alcohol and other drug use. Answers are either right or wrong and no feedback on why is offered. The list of questions used is not given in the manual, making it difficult for teachers to know how the package fits into the curriculum.

Comments: This package contains a master game disk, a double-sided data disk, and a 10-page manual.

Health Comes First with the Diddely-Dop Gang

Producer: Focus Media, Inc. **Copyright:** 1988

Price: $99.00 for each module, $198.00 for both, 12-copy lab pack for $297.00

Hardware: Apple II family with 64K RAM

Grades: 3-5

Type: Tutorial, drill

Contents: Four 5.25 disks and an 20-page teacher's guide.

Description: This package contains a series of health-related reading comprehension stories about the Diddely-Dop Gang. Students read along as Zipped, Teddy, and Geraldine discuss many health issues. Each story is followed by a brief multiple-choice quiz. Constructive feedback is provided for both correct and incorrect responses. In "Drug Abuse: A Deadly Choice," the gang discusses the harmful effects of illegal drugs, why kids take drugs, and reasons for saying no to drugs. In "Alcohol Abuse, Ruined Lives," the gang discusses the dangers of alcohol use, the effects of alcohol abuse on families, alcoholism, treatment of alcoholism, and responsible use of alcohol. Other topics covered by the program include smoking, physical fitness, nutrition, and medical and dental care. A management system is available that records students' quiz results to disk for review by the teacher at a later time. A report is available that gives the students' scores as well as how well their responses met the reading objectives of the package. The system is capable of tracking the work of up to 100 students. Other options include sound control, animation control, and automatic or manual story assignments.

Possible Uses: This program is appropriate for use with individual students.

Strengths: Drug and alcohol prevention is only a small portion of the program. The management system is a nice feature. The screens are colorful and attractive and the reading passages are clear, and unlike many Apple II programs, easy to read on a color monitor.

Weaknesses: The program discusses the difference between alcohol use and abuse and does not address the illegality of alcohol use for adolescents.

Health Issues Today: Alcohol: Danger in a Bottle

Producer: Queue, Inc. **Copyright:** 1990

Price: $34.95, $44.95 with management system

Hardware: MS-DOS compatible computer with 64K RAM, one 5.25 inch disk drive, color or monochrome monitor, BASICA or GWBASIC

Grades: 7-12

Type: Tutorial

Contents: One 5.25 inch disk, a 14-page user's guide, and a 15-page guide that gives an overview of the entire series.

Description: This package contains 8 tutorials made up of a series of text passages followed by one or more related multiple-choice, or true/false questions. At the end of each lesson, the program reports the number of questions the student answered correctly and incorrectly, and the percentage correct. A management system records the students' progress for review or printing by the teacher at a later time. The lessons cover what alcohol is, legal and illegal use, the effects of alcohol on the body, the effects of alcohol on behavior, alcoholism, treating alcoholism, drinking and driving, the effects of using alcohol with other drugs, and the effects of alcohol on the fetus. A review section tests students' understanding of the material presented in the eight lessons.

Possible Uses: This package is most appropriate for use by individual students.

Strengths: The program stresses the illegality of under age drinking. Students are given correct responses and an explanation each time an incorrect answer is given.

Weaknesses: The lessons are a linear sequence with no branching or randomization of questions. The instructional format of text followed by questions without any variation or graphics is uninteresting. The program is technically primitive by current standards.

Health Issues Today: Athletes, Steroids, and Other Drugs

Producer: Queue, Inc. **Copyright:** 1990

Price: $34.95

Hardware: MS-DOS compatible computer with 64K RAM, one 5.25 inch disk drive, color or monochrome monitor, BASICA or GWBASIC

Grades: 7-12

Type: Tutorial

Contents: One 5.25 inch disk, a 14-page user's guide, and a 15-page guide that gives an overview of the entire series.

Description: This package contains 9 tutorials made up of a series of text passages followed by one or more related multiple-choice, or true/false questions. At the end of each lesson, the program reports the number of questions the student answered correctly and incorrectly, and the percentage correct. A management system records the students' progress for review or printing by the teacher at a later time. The lessons cover what steroids are, the dangers of steroid use, teenage use of steroids, the role of pain in personal health, the danger of painkillers, amphetamines and tranquilizers, marijuana, tobacco, alcohol, and ways to prevent the use of steroids. A review section tests students' understanding of the material presented in the nine lessons.

Possible Uses: This package is most appropriate for use by individual students.

Strengths: Students are given correct responses and an explanation each time an incorrect answer is given.

Weaknesses: The lessons are a linear sequence with no branching or randomization of questions. The instructional format of text followed by questions without any variation or graphics is uninteresting. The program is technically primitive by current standards.

It's Wise to Say "NO" to Alcohol! I & II

Producer: Right On Programs **Copyright:** 1987

Price: $39.95 each, $150.00 for all 4 programs in the Drugs & Alcohol Series

Hardware: Apple II e c GS

Grades: 2-6

Type: Tutorial

Contents: Each package has two 5.25 inch disks, a 9-Page Teacher's guide, and 15 reproducible activity worksheets.

Description: This two-package series offers students many reasons why they should say no to alcohol. Level I is intended for students in grades 2 through 4 while level II is intended for grades 4 through 6. Both packages cover the same material.

The program begins with a section designed to help students cope with feelings of unhappiness. It describes a situation in which a student receives a bad grade and allows the students using the program to choose a response. Possible responses include crying, kicking the desk, talking to parents, taking a drink, and more. After each choice the program presents a commentary highlighting the pros and cons of the response. The next section presents a discussion about the reasons why children or adults drink alcohol and refutes each with very common sense arguments. The final section of the program stresses self-worth and outlines ways to make yourself feel better by focusing on the positive rather than resorting to alcohol.

Possible Uses: This program can be used by individual students or by small groups of students.

Strengths: The portion of the program which discusses the students reactions to bad feelings is well-done. The focus on teaching students to cope with feelings of unhappiness is a positive approach to prevention.

Weaknesses: Although the program stresses "it's wise to say no," much of the text uses the phrase "drink too much." This mixed message implies it is okay to drink as long as you don't "drink too much." The program does not stress the illegality of drinking for adolescents. Much of the program involves reading the screens and pressing the space bar to go to the next screen. Student interaction in these sections is minimal.

It's Wise to Say "NO" to Drugs! I & II

Producer: Right On Programs **Copyright:** 1984

Price: $39.95 each, $150.00 for all 4 programs in the Drugs & Alcohol Series

Hardware: Apple II e c GS

Grades: 2-6

Type: Tutorial

Contents: Each package has one 5.25 inch disk, a 10- to 13-Page Teacher's guide, and 15 reproducible activity worksheets.

Description: This two-package series offers students many reasons why they should say no to alcohol. Level I is intended for students in grades 2 through 4 while level II is intended for grades 4 through 6. Both packages cover the same material.

The program begins with a section that examines the reasons why some people take drugs when they are not sick. The next section helps students cope with feelings of unhappiness. It describes a situation in which a student has a fight with a friend and allows students using the program to choose a response. Possible responses include finding a new friend, telling someone your friend is stupid, talking to your parents, taking a drug to feel better, and more. After each choice the program presents a commentary highlighting the pros and cons of the response. The next section of the program helps students develop refusal skills. It describes a playground situation in which the student is offered a pill by another student named Joe. The student can then choose from a number of responses that include saying no, throwing the pill away, taking the pill, telling your parents, punching Joe, and more. As before, after each choice the program presents a commentary highlighting the pros and cons of the response. The final section of the program stresses self-worth and outlines ways to make yourself feel better by focusing on the positive rather than resorting to drugs.

Possible Uses: This program can be used by individual students or by small groups of students.

Strengths: The focus on teaching students to cope with feelings of unhappiness is a positive approach to prevention. The program stresses that anyone who tries to give you drugs other than your parents or a doctor is a bad person.

Weaknesses: The portion of the program which discusses the students' reactions to unhappy feelings could be strengthened by providing more in-depth discussion of the pros and cons of each choice. The program does not stress the illegality of drugs.

Marijuana: Keep Off The Grass

Producer: Substance Abuse Education **Copyright:** 1992

Price: $44.95, $199.75 for the network version

Hardware: Apple II family with 64K RAM; MS-DOS with 256K RAM and CGA, EGA, or VGA graphics card; Macintosh with 1MB of RAM with HyperCard 1.2 or higher

Grades: 7-12

Type: Tutorial

Contents: One 5.25 inch disk and a one-page instruction sheet.

Description: This program provides a list of objectives, 3 tutorial lessons, a glossary of 15 alcohol-related terms, and a 20-question multiple-choice test. The tutorials are titled "What is Marijuana," "The Physical Effects of Marijuana," and "The Psychological Effects of Marijuana." Together the lessons cover marijuana-related terms; the definitions of marijuana; the pleasant, unpleasant, and harmful effects of marijuana, amotivational syndrome, and decision making. The tutorials are made up of a mixture of text and graphic screen and multiple-choice or true/false questions. An explanation is given after each student response.

Possible Uses: This package is useful with highly motivated students, one student or a small group of students at a time.

Strengths: The screen layout is colorful and attractive. The glossary of terms is available at any time during the lessons.

Weaknesses: The lessons are a linear sequence with no branching or randomization of questions. The MS-DOS version implies choice and does not stress the illegality of marijuana use.

No Drugs/Know Prevention Series

Producer: ARCO Educational Systems, Inc. **Copyright:** 1988

Price: $439.00 for the complete system. Each module is available separately for $39.95.

Hardware: MS-DOS compatible computer with a high density 3.5 inch disk drive and a VGA color graphics display. Apple II e or c

Grades: 4-12

Type: Drill

Description: "No Drugs/Know Prevention" is a series of 14 individual drug education and prevention software titles. Each package offers a series of matching tests in which students are presented with questions, one-at-a-time, and must choose the correct answer from the list of 10 possible answers. Individual titles in the series are "A Guide to Drugs and Their Effects I & II," "Cocaine," "Marijuana," "Alcohol," "Drug & Alcohol Terms," "Barbiturates," "Stimulants," "Psychoactive Drugs I & II," "Drug and Alcohol Review," "Steroids," and "Social Aspects of Alcohol and Other Drugs."

Possible Uses: The program is appropriate for use as a review with individual students at the end of a unit on substance abuse.

Strengths: The format is easy to use. The printed report of the students' score is a nice feature.

Weaknesses: The matching format does not eliminate a choice once matched nor does it allow the student to skip a question and return to it later. Student responses are either right or wrong. No corrective feedback is provided.

Say kNOw

Producer: Orange Juice Software Systems **Copyright:** 1988

Price: $45.00

Hardware: Apple II + e c GS with 48K RAM

Grades: 10-Adult

Type: Tutorial, inventory

Contents: One 5.25 disk and a 9 page user's guide.

Description: This program offers a series of lessons that centers around the word "Know" in the phrase "Say kNOw." In the lesson "The K in Saying Know: The Key to Personal Needs," students learn about Maslow's theory of fulfillment of needs. Student travel along a path of fulfilled need by correctly answering yes/no questions which unlock the door to the next room. The journey helps students understand the necessary conditions for satisfying physical needs, safety needs, the need for love and belonging, the need for self esteem, and finally, achieving self-actualization. In the lesson "The NO in Saying kNOw: A communication Survey," students are introduced to non-assertive, assertive, and aggressive styles of communication. Students then assess their own communication style through a series of multiple-choice questions. Following the survey, the program rates the students' communication style and makes suggestions that help the student communicate in a more assertive manner. This lesson is followed by an exercise where students are given the opportunity to practice assertive responses. In the lesson "The W in Saying kNOw: The Worth Girth Survey," students take a survey that helps them measure their self-worth. Upon completing the survey, the program gives suggestions that will help the students improve the perception of self-worth.

Possible Uses: The program can be used by individual students.

Strengths: The program approaches the problem of substance abuse by giving students an understanding of the relationship between substance abuse and self-esteem and provides students with tools to help them improve their own self-esteem.

Weaknesses: Although the content is strong, the program is technically weak. It is very linear and does not allow the student to escape or review their responses to questions.

S.M.A.R.T. Choices

Producer: Tom Snyder Productions **Copyright:** 1990

Price: $119.95

Hardware: Apple II family with 64K of RAM, MS-DOS computer with 256K of RAM and either 5.25 inch or 3.5 inch disk drives, Macintosh with 1MB of RAM

Grades: 5-12 **Type:** Simulation

Contents: One 5.25 inch floppy disk, a backup, a 101-page teacher's guide, and 30 student reference booklets.

Description: This program enables one computer with a large-screen monitor or overhead projector monitor to coordinate a classroom simulation involving as many as 30 students. The simulation begins with a description of the initial situation that involves one student inadvertently blundering into the middle of a drug purchase in school. As he realizes the student purchasing the drugs is a close friend, the friend and the pusher drop the drugs and make a run for it. Just then a teacher approaches. What will he do? Before proceeding with the simulation, the class first prioritizes a list of goals that includes the following: help the friend, stay out of trouble, keep the respect of others, and keep self-respect. When the simulation begins, the class is confronted with a series of decisions. Before making the decision, however, the class is given input from the "mysterious friend" and four different "voices." The mysterious friend appears on the computer and relates the decision about to be made with the original goals prioritized earlier. The voices are identified by numbers given by the computer and refer to passages that students read in the Student Reference Booklet. The voices often represent widely differing points of view. Upon reaching a decision, the computer relays the results and presents the class with a new decision to be made. The simulation offers approximately 300 different paths. When the simulation concludes, the class rates their performance toward achieving their initial goal. Their rating is translated into a scale from 0 to 100 that indicates how well their performance in the simulation agrees with their initial goals. The program also contains a "random student picker" which can be used by the teacher to randomly identify a student in the class to make the final decision after class discussion of the options.

Possible Uses: This program is designed for use with large groups of students to stimulate discussion.

Strengths: The program makes excellent use of the computer. It provides an excellent setting for class discussion.

Weaknesses: Most schools and communities today have help and support available for students who are found using alcohol and other drugs. The program would be much stronger if options were available for students to exercise peer helper skills to guide the friend toward professional help. The guidance available was primarily punitive in nature.

Squeegee Learns About Drugs

Producer: MarshWare, A Division of Marshfilm, Inc. **Copyright:** 1990

Price: $55.00, $110.00 for a five-disk lab pack.

Hardware: Apple II+ e c GS with 48K RAM, one 5.25 inch disk drive, color or black and white monitor

Grades: K-2

Type: Tutorial, Drill, Game

Contents: One double-sided 5.25 inch disk, and a 9-page user manual.

Description: The program offers a tutorial titled "Learn about drugs" that focuses on the safety of drugs as it relates to medicines. The tutorial is a series of text and graphic screens that are reinforced with eight yes/no questions. Constructive feedback is provided for each students responses. The program also contains the game titled "Squeegee's Drug Safety," in which students travel from one stop to another by correctly answering yes/no questions that require students to choose the safe action. If students respond correctly, they advance to the next stop. If they answer incorrectly, they can end up in the hospital and must correctly answer another question to get released. If a printer is attached to the computer, a certificate can be printed upon successful completion of the game. The program also contains a 12-word glossary that is accessible from the main menu or from the tutorial screens.

Possible Uses: The package is most appropriate for use with individual students. Small groups of two to three students would also benefit.

Strengths: The program focuses on safety issues relating to every-day chemical items such as cleaners and medicines. The message is not to take anything that doesn't come from a reliable source.

Weaknesses: The lessons are strictly linear with no randomization or branching. Questions to the student are strictly yes and no with corrective text feedback. The reading level seems too high, especially for kindergarten and first graders.

That's Life!: To Your Health

Producer: Focus Media, Inc. **Copyright:** 1989

Price: $49.00, 12-copy lab pack for $147.00. The entire four-package series is available for $159.00.

Hardware: Apple II family with 64K RAM

Grades: 5-12

Type: Tutorial, drill

Contents: One 5.25 disk and an 18-page teacher's guide.

Description: This package is one of four packages in the "That's Life!: Reading for Understanding Series." It contains a series of ten reading comprehension stories about health-related topics. Each story is followed by a brief multiple-choice quiz. Constructive feedback is provided for both correct and incorrect responses. In "Drinking," students read about how alcohol had adversely affected the lives of two teens. In "Alcohol and Drinking," students read a story about the concerns and actions of a woman who has a neighbor who drives home after drinking every evening. Other topics covered by the program include fastfood, nutrition, seatbelts, and more. A management system is available that records students' quiz results to disk for review by the teacher at a later time. A report is available that gives the students' scores as well as how well their responses met the reading objectives of the package. The system is capable of tracking the work of up to 100 students. Other options include sound control, animation control, and automatic or manual story assignments.

Possible Uses: This program is appropriate for use with individual students.

Strengths: Alcohol and other drug prevention is only a small portion of the program. The management system is a nice feature. The screens are colorful and attractive and the reading passages are clear, and unlike many Apple II programs, easy to read on a color monitor.

Weaknesses: The program does not address the illegality of alcohol use for adolescents.

Using Cocaine & Crack: The Choice in Yours

Producer: Substance Abuse Education **Copyright:** 1992

Price: $44.95, $199.75 for the network version

Hardware: Apple II family with 64K RAM; MS-DOS with 256K RAM and CGA, EGA, or VGA graphics card; Macintosh with 1MB RAM

Grades: 7-12

Type: Tutorial, game

Contents: One 5.25 inch disk and a one-page instruction sheet.

Description: This program provides a list of objectives, four tutorial lessons, a glossary of terms, a multiple-choice self-test, and a game. The tutorials are titled "Basic Concepts about Cocaine," "Danger of Using Cocaine," "What is Cocaine?" and "What Does Cocaine Do?" Together the lessons cover cocaine-related terms; the definitions of cocaine; stimulants and depressants, tolerance, the pleasant, unpleasant, and harmful effects of cocaine, dependence on cocaine, and withdrawal. The tutorials are made up of a mixture of text and graphic screen and multiple-choice or true/false questions. An explanation is given after each student response. In the game "Snowblind," students may play the role of three different people who are confronted with social situations involving cocaine. The students choose from a variety of options and win the game if they can avoid cocaine use.

Possible Uses: This package is useful with highly motivated students, one student or a small group of students at a time.

Strengths: The screen layout is colorful and attractive. The glossary of terms is available at any time during the lessons.

Weaknesses: The lessons are a linear sequence with no branching or randomization of questions. The MS-DOS version implies choice and does not stress the illegality of cocaine use.

Interactive Video Products

Interactive video products (level III) utilize a computer to control and access video sequence (movies), video images, and sounds that are stored on a videodisc or CD-ROM (compact disc, read only memory). The software also contains a vast amount of information in the form of text and computer graphics to supplement the video. Interactive video products enable the user to easily move from one segment of the program to another, choose from the vast array of video sequences and stills, or to draw from the database of materials stored in the computer software. Many interactive video products also include a presentation authoring system which allows students or teachers to compose their own multimedia presentations from the information available in the program. Below are descriptions of two such products reviewed for this guide.

Target Interactive Project-Drug & Alcohol Responsibility for Teens (TIP-DART)

Producer: National Federation of State High School Associations **Copyright:** 1989

Price: $2495.00

Hardware: MS-DOS compatible computer with at least 3MB of available hard disk space, a videodisc player, and monitor. Versions are available that support interactive video configurations that utilize the IBM Linkway and a videodisc player combination, IBM InfoWindows system with one or two videodisc players, and interactive video systems that use the M-Motion video interface.

Grades: 9-12

Type: Simulation

Contents: One double-sided videodisc, a set of master disks, an installation guide, and a teacher/learner's guide.

Description: This interactive video simulation provides a vehicle for students to practice managing high-risk situation involving the use of alcohol, drugs, and tobacco. Students find themselves at Cathy's surprise party that her friends organized at Cathy's house while her parents were away. Students may choose to follow the actions of any of seven different party guests. As the events of the party unfold, students encounter decision points where the character they are following is confronted with a choice involving alcohol or other drug use. The students make the decision for the character and accordingly, the simulation take on a new direction. There are numerous paths through the simulation, each leading to a different outcome depending upon the nature of the decisions made along the way. Cathy's younger brother (wearing a "Party Police" T-shirt) is also present at the party and adds a touch of humor along with a fresh perspective that frequently challenges the behavior of the party guests.

Students have complete control over the video. They can stop, start or replay any scene as they choose. Occasionally, thought

balloons are available (on InfoWindows version) that allow students to hear what an individual is thinking. An "Alcohol and Other Drugs Organization" section is available that contains information about services available through local organizations such as crisis hotlines, referral services, emergency medical treatment, and more. In addition, the program offers a "What Do You Think" section in which students respond to questions that frequently relate to the motives of the characters in the simulation. Upon each response, students learn how their peers responded to the question as well as the correct response. Questions are organized by into sections titled "Party Thoughts," "Substance Data," and "Opinion Survey."

The program may be used in the student mode as described above, or in the teacher mode. The teacher mode allows information to be added and modified in the "Alcohol and Other Drug Organizations" section. It also allows the teacher to view or show any of the video scenes independently of the sequenced defined in the simulation. Scenes may be accessed by character, substance, refusal skill demonstrated, consequence, or type of help provided.

Possible Uses: This package can be used by individual students, small groups of students, or with large group in a teacher-directed demonstration mode.

Strengths: The program is highly interactive and holds students' attention. The no-use message is not explicitly given but strongly implied. The notion of responsible use of alcohol is not present. Choices are to accept or refuse alcohol or other drugs.

Weaknesses: The program does not address the illegality of adolescent drinking. It is a given that alcohol and other drugs are available at the party.

Understanding Ourselves: Drugs and Substance Abuse

Producer: ABCNews InterActive **Copyright:** 1990

Price: This package is part of a three package series. The entire series is available through Optical Data for $1185.00. Other packages in the series are titled "AIDS" and "Teenage Sexuality."

Hardware: Macintosh with 1MB of memory, HyperCard 2.0 or higher, hard disk with 4MB of free space, videodisc player with monitor, barcode reader optional

Grades: 7-12

Type: Tutorial

Contents: One double-sided videodisc, four 3.5 inch floppy disks, a 113-page user's manual, a 128-page teacher's guide, a quick reference card, reproducible student worksheets.

Description: This interactive videodisc and accompanying HyperCard stacks provide background information about drugs and offer a comprehensive look at the effects of drugs and substance abuse on the human body, the mind, and on society. ABC News anchorman, Ted Koppel, serves as a host and the former Surgeon General of the United States, Dr. C. Everett Koop, provides much of the narrative. The videodisc is the primary source of information and can be controlled manually, with a barcode reader, or with a Macintosh computer and the accompanying HyperCard stacks. In addition to point and click control of the video, the HyperCard stacks provide a wealth of information that supports the video. The stacks are primarily a series of information cards that are accessed through menu choices which provide the organizational structure of the program. Each card contains background information about a topic in text that frequently contains 'hot words' that when clicked display the definition. The information cards also contain buttons which activates corresponding video sequences, displays the verbatim text of the narration, and access to other support materials such as discussion questions, fact files and reference files. Text and voice narration is available in both Spanish and English.

Side one of the videodisc contains a Drug Reference section and a section on Addiction. The Drug Reference provides background information, uses, effects, symptoms, and the street names for caffeine, alcohol, tobacco, marijuana, cocaine & crack, narcotics, steroids, inhalants, stimulants, depressants, designer drugs, and hallucinogens. Side two of the videodisc contains sections on Drugs and Society and Taking Responsibility. The Drugs and Society section provides segments on the cost of drugs to society, drugs and the family, the effects of drugs on the fetus, drugs and the community, the impact of the media, the law, and drug testing. The Taking Responsibility section provides segments on saying 'No,' coping with stress, helping yourself and others, setting goals, and developing high self-esteem.

The HyperCard stack also offers a resource file that provides direct access to cards containing discussion questions, documents, and contact information for national, state, and local alcohol and other drug prevention organizations. The contact information cards can also be added to or updated by the teacher.

The program offers two ways to create your own presentation from videodisc and text information in the HyperCard stacks. Any information card can easily be 'marked' and placed on a list of marked cards. This list can be retrieved at any time and the marked cards can be called up in order. The Documentary Maker allows the user to pick and choose from the many video sequences and stills available on the videodisc and then arrange them in any order. The completed presentation can be controlled manually or set to advance to the next video automatically.

Possible Uses: This product is best used as a tool for making presentations to large groups. By simply going through the menu items in order, reading the text on the HyperCard , and showing the video sequence makes a very powerful lesson. The program could also be used by individual or small groups of students in the same manner. The program also can serve as a valuable source of reference materials.

Strengths: The program is extremely versatile, allowing the user to move easily from one topic to another. The HyperCard stacks contain a wealth of information that supports the video. The ability to create customized presentations is a very powerful feature of this program.

Weaknesses: The HyperCard program is very slow with long response times for each action. The presentation frequently uses a "talking head" approach and other times relies on fear and scare tactics to discourage drug use.

Videodisc Products

Non-interactive videodiscs (level I) are really not very different from a video cassette except for one very important aspect. With videodiscs, every individual image or frame is numbered and can be displayed independently. With a microcomputer connected to a videodisc player and any of a number of multimedia software packages, students and teachers can sequence selected video images, video clips, and sound tracks to make their own custom-made multi-media presentations. Any of the following videodiscs can be used in this manner to create such custom presentations. This listing is for the purpose of identification only. Since these products are so similar to video cassettes, they were not reviewed in the same manner as the software and interactive video products described earlier.

Alcohol...Drugs...and Kids

Producer: AIMS Media

Price: $345.00 **Length:** 18 min.

Grades: 6-9

Description: Four teenagers in an alcohol and drug rehabilitation center tell their story about how their addiction began and progress into a full addiction as they tried to cope with personal problems. The counselor in the center also provides information about peer pressure, self-esteem, and the problems that kids have when addicted. The teens stress that other help is available and that young people do not need to turn to drugs.

Alcohol and Human Physiology

Producer: AIMS Media

Price: $375.00 **Length:** 23.5 min.

Grades: 9-Adult

Description: This program uses medical pictures, X-rays, microscopic images, organ tissues, and the testimony of six recovering alcoholics to demonstrate the destructive effects of alcohol on the human body.

Be Smart! Be Safe! A Drug Education Program

Producer: Society For Visual Education

Price: $125.00 **Length:** 21 Min.

Grades: K-3 **Format:** CAV

Description: This video program is designed to warn young children of the dangers of alcohol, tobacco, and other drugs. Features include bar coding, full motion, still pictures, audio track, and teacher materials.

Causes and Effects of Abuse

Producer: AIMS Media

Price: $395.00 **Length:** 20 min.

Grades: 6-12, Parents & Counselors

Description: Martin Kove and his karate students discuss the cause and effect relationship of decisions and how decisions get more difficult as the students get older. Three dramatizations involving drug use, drinking and driving, and drinking during pregnancy provide opportunities for students to explore difficult decision-making situations.

Cocaine and Human Physiology

Producer: AIMS Media

Price: $350.00 **Length:** 20 Min.

Grades: 9-Adult

Description: This program uses medical pictures, X-rays, microscopic images, and testimonials from recovering addicts to demonstrate the harmful effects of cocaine on the human body and mind. The program also covers the effects on the fetus. The videodisc is in English on audio channel one and Spanish on audio channel two.

Designer Drugs and Human Physiology: Crack Cocaine, Methamphetamine

Producer: AIMS Media

Price: $275.00 **Length:** 13.5 min.

Grades: 9-Adult

Description: This program uses charts, models, and X-rays to demonstrate the effects of crack, speed, and methamphetamines on the human body. It also covers the rapid addiction that results and the spread of AIDS among users who share needles.

Designer Drugs and Human Physiology: PCP, Ecstasy, Fentanyl

Producer: AIMS Media

Price: $375.00 **Length:** 18.5 min.

Grades: 9-Adult

Description: This program defines PCP, ecstasy, and fentanyl and describes their effects on the brain. It also covers the effects of designer drugs on the fetus, the danger of mixing drugs and alcohol, and the spread of AIDS among users who share needles.

Drugs, Alcohol, and Your Body

Producer: AIMS Media

Price: $275.00 **Length:** 14 Min.

Grades: K-8

Description: This program begins with a quiz designed to heighten students' concern for their own personal health and safety. Then animated cartoons of the parts of the human body teach students the dangers of alcohol and other drugs by complaining that they cannot do their job while affected. The program also covers refusal skills and methods of coping with peer pressure.

Drugs, Drinking, and Driving

Producer: AIMS Media

Price: $275.00 **Length:** 15 min.

Grades: 10-Adult

Description: This program provides dramatization of the tragic consequences of drinking and driving based on actual events taken from the files of the National Highway Traffic Safety Administration. It also contains information about how alcohol and other drugs effect reaction time, perception, and judgment. The videodisc is in English on audio channel one and Spanish on audio channel two.

DUII-The Price is Too High

Producer: AIMS Media

Price: $395.00 **Length:** 23 min.

Grades: 10-Adult

Description: This program uses three dramatizations of young first-time offenders to demonstrate the life-altering legal consequences of driving under the influence of intoxicants.

Heroin and Human Physiology

Producer: AIMS Media

Price: $395.00 **Length:** 22 Min.

Grades: 9-Adult

Description: This program covers the definition of opiates, their uses and abuses, street terminology for opiates, and that lethal doses are an ever present danger. The physician-narrator discusses and provides graphic illustrations of the physical effects of heroin. The program also covers the spread of AIDS among users of heroin. The videodisc is in English on audio channel one and Spanish on audio channel two.

If Your Parents Drink-You're Not Alone

Producer: Encyclopaedia Britannica Educational Corporation

Price: $129.00

Grades: K-3 **Format:** CAV

Description: The "Big Kahooney," a wise character, helps students understand and cope with the anxiety and guilt that they feel when their parents drink.

Making the Right Decision

Producer: AIMS Media

Price: $375.00 **Length:** 18 min.

Grades: 6-9, Parents & Counselors

Description: Martin Kove discusses with a group of junior high school students the importance of being prepared to make decision by having a clear understanding of the things that make you feel good about yourself. Three dramatizations involving drug use, alcohol use, and child abuse provide opportunities for students to examine difficult decision-making situations.

Marijuana and Human Physiology

Producer: AIMS Media

Price: $375.00 **Length:** 21.5 min.

Grades: 9-Adult

Description: This program uses anatomical models, charts, biopsy photos, photomicrographs of cells, and testimonials of marijuana users to demonstrate the harmful effects of marijuana on the body. It also discusses the "pot personality" and the hazards of driving while under the influence. The videodisc is in English on audio channel one and Spanish on audio channel two.

Marijuana and the Mind: Addiction and Intoxication

Producer: AIMS Media

Price: $395.00 **Length:** 22 min.

Grades: 9-Adult

Description: Laboratory demonstrations, interviews with physicians and medical researchers, and testimonials of addicts are used to summarize current research on the effects of marijuana on the brain. It reports on loss of short-term memory, inhibited ability to learn, impaired thinking skills, impaired mobility, attention deficit, and a distorted space/time perception. The program communicates that "marijuana can ruin lives just as surely as heroin or crack; it only takes longer." The videodisc is in English on audio channel one and Spanish on audio channel two.

McGruff's Drug Alert

Producer: AIMS Media

Price: $260.00 **Length:** 11 min.

Grades: K-8

Description: The cartoon character "McGruff the Crime Dog" teaches students yet another way to "take a bite out of crime" by saying no to drugs. The program covers the dangers of drug use, people who give drugs to children are nobody's friend, the difference between medicine and illegal drugs, and that illegal drugs are analogous to dangerous poisons commonly found in the home except that they are not marked as dangerous.

Social Drinker and the Anti-Social Driver, The

Producer: AIMS Media

Price: $375.00 **Length:** 21 min.

Grades: 10-Adult

Description: This program provides statistics that support the argument that social drinkers are the cause of most traffic accidents in which alcohol was a factor. The program seeks to dispel false beliefs and misconceptions regarding casual drinking and offers sensible alternatives to driving after drinking.

Distance Learning Programs

The following organization offers television courses delivered by satellite that can be used to support an alcohol and other drug education program. These satellite distance learning courses are particularly useful for smaller rural schools where trained and experienced alcohol and other drug educators and specialists are unavailable.

Satellite Telecommunications Education Programming (STEP)
Educational Service District 101
West 1025 Indiana Avenue
Spokane, WA 99205-4561
Phone: (509) 536-0141

Programs Offered:
- An Introduction to Drugs and Alcohol
- Here's Looking At You, 2000
- Kids Care Retreats Training
- Parent Networking
- Peer Helper Retreats, An Overview
- Preparing For The Drug (Free) Years
- Refusal Skills
- Together We Can

Producer Contact Information

ABC News InterActive distributed by Optical Data
30 Technology Drive
Warren, NJ 07059
Phone: (800) 524-2481,
(908) 668-0022
Fax: (908) 668-1322

AIMS Media
9710 DeSoto Avenue
Chatsworth, CA 91311-4409
Phone: (800) 367-2467,
(818) 773-4300
Fax: (818) 341-6700

ARCO Educational Systems, Inc.
7211 North Dale Mabry Highway,
Suite 215
Tampa, FL 33614
Phone: (800) 473-6625,
(813) 935-9353
Fax: (813) 931-7078

BLS TutorSystems, Inc.
5153 West Woodmill Drive
Wilmington, DE 19808
Phone: (800) 545-7766,
(302) 633-1616

CompTech Systems Design
P.O. Box 107
Waconia, MN 55387
Phone: (800) 343-2406,
(612) 442-9776

Cross Educational Software
P.O. Box 1536, 504 East Kentucky Avenue
Ruston, LA 71270
Phone: (318) 255-9821

Encyclopaedia Britannica Educational Corporation
310 South Michigan Avenue
Chicago, IL 60604-9839
Phone: (800) 554-9862
Fax: (312) 347-7903

Focus Media, Inc.
839 Stewart Avenue
Garden City, NY 11530
Phone: (800) 645-8989
Fax: (516) 794-8920

Learning Multi-Systems, Inc
320 Holtzman Road
Madison, WI 53713
Phone: (800) 362-7323
Fax: (608) 273-8065

MarshWare,
A Division of Marshfilm, Inc.
P.O. Box 8082
Shawnee Mission, KS 66208
Phone: (800) 821-3303
Fax: (816) 333-7421

Mindscape Educational Software, A Division of SVE
1345 Diversey Parkway
Chicago, IL 60614-1299
Phone: (800) 829-1900

National Federation of State High School Associations
17724 Plaza Circle
P.O. Box 20626
Kansas City, MO 64195
Phone: (816) 464-5400

Orange Juice Software Systems
338 South Arch Avenue
New Richmond, WI 54017
Phone: (715) 246-3588
Fax: (715) 246-7120

Queue, Inc.
338 Commerce Drive
Fairchild, CT 06430
Phone: (800) 232-2224

Right On Programs
755M New York Avenue
Huntington, NY 11743
Phone: (516) 424-7777
Fax: (516) 4
24-7207

Producer Contact Information

Society For Visual Education, Inc.
1345 Diversey Parkway
Chicago, IL 60614
Phone: (800) 829-1900
Fax: (800) 624-1678

Student Awareness Software
P.O. Box 18134
Portland, OR 97213
Phone: (503) 287-3530

Substance Abuse Education
670 South 4th Street
Edwardsville, KS 66113
Phone: (913) 441-1868

Tom Snyder Productions
90 Sherman Street
Cambridge, MA 02140-9923
Phone: (617) 876-4433

Glossary

CD-ROM CD-ROM is an acronym for Compact Disc--Read Only Memory. A CD-ROM is a small disc approximately 4.75 inches in diameter that is used to optically store large quantities of digital information. The most common use of CD-ROM is to store audio data on the popular music CD's. The same device can also store any type of digital information such as computer programs, text and graphic data, video images, as well as sound.

Drill The drill aspect of a computer software program provides practice with facts or concepts that the students have been taught through another means.

Game A computer software program is said to have a game component if students are competing for scores either against the computer or against other students. Frequently, games are used to disguise drills.

Simulation A computer software program is said to be a simulation if it creates an environment modeled after a real-world situation in which students can interact.

Tutorial A computer software program is said to have a tutorial component if it introduces the student to new material or conveys new information that they have not gained through another means.

Videodisc A videodisc is a disc-shaped optical storage device that is approximately one foot in diameter. Videodiscs are used to digitally store video and audio information. Videodiscs programs are frequently available on video cassette as well. There are several different levels of videodisc equipment available that corresponds to the types of products available. Level I products utilize a videodisc player and a monitor only with control performed manually. Level II requires a videodisc player that contains a processor capable of responding to program controls stored on the videodisc. Level II videodisc products are seldom used in K-12 education. Level III products utilize a videodisc player that is connected to a computer. They include software that enables the computer to control and supplement the information displayed by the videodisc player.

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The Northwest Regional Educational Laboratory (NWREL) is an independent, nonprofit research and development institution established in 1966 to help others improve outcomes for children, youth, and adults by providing R&D assistance to schools and communities in providing equitable, high quality educational programs. NWREL provides assistance to education, government, community agencies business, and labor by:

- Developing and disseminating effective educational products and procedures
- Conducting research on educational needs and problems
- Providing technical assistance in educational problem solving
- Evaluating effectiveness of educational programs and projects
- Providing training in educational planning, management, evaluation, and instruction
- Serving as an information resource on effective educational programs and processes, including networking among educational agencies, institutions, and individuals in the region

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